



# ecology and environment, inc.

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International Specialists in the Environment

## MEMORANDUM

Site:	<i>Maline Creek</i>
ID#:	<i>MOD 980631162</i>
Break:	<i>1.5</i>
Other:	<i>9-21-92</i>

TO: Paul Doherty, EPA/DPO

FROM: Joseph M. Parish, E & E/TATM *(HQ) for J.P.*

THRU: Joe Chandler, E & E/TATL *(HQ) for J.C.*

DATE: September 21, 1992

SUBJECT: Site Assessment: Certain-Teed-Maline Creek Site,  
Bellefontaine Neighbors, St. Louis County, Missouri  
TDD#: T07-9209-003  
PAN#: EM00307SBA  
EPA/OSC: Don Hamera

## INTRODUCTION

The Ecology and Environment Technical Assistance Team (E & E/TAT) was tasked by the U.S. Environmental Protection Agency Emergency Planning and Response Branch (EPA/EP&R) to investigate the extent of asbestos contamination at the Certain-Teed-Maline Creek Site (A.K.A. Certain-Teed Transit Pipe). Specific elements of the task included providing video and photographic documentation of an area along the northeast bank of Maline Creek approximately 200 yards upstream from the former investigation conducted under TDD number T07-9203-012A. A four to five foot thickness of transit pipe was reportedly exposed along the upper section of the bank. TAT conducted the task on September 3, 1992.

## SITE HISTORY

Prior to the March investigation (TDD number T07-9203-012, Ref. 4) the site was brought to the EPA'S attention through a congressional inquiry from the office of congressman William Clay. Apparently, the inquiry was initiated through a citizen complaint.

The former Certain-Teed property at 600 St. Cyr Road is currently owned by P.G. Investments. Branch Metal Processing Company, owned by P.G. Investments, and Gateway Container Port, Inc., are presently occupying the site. The former GAF property at 9215 Riverview Blvd. is currently owned by Clark Properties of Hazelwood, Missouri. The property currently in question is occupied by The New Era Group, Riverview Industrial Services, and MacMillan-Blodell Building Materials.

The area around the properties is industrial/residential and is in the corporate limits of Bellefontaine and Riverview Neighbors. There are approximately 150-200 people residing in the immediate area and a

1.0  
30290419  
Superfund  
DKF  
04100

nursing home is located 350 feet northwest of the site. There are no known wells in the area and all drinking water is supplied by the City of St. Louis Chain of Rocks WTP upstream from the site. Maline creek empties into the Mississippi River approximately 1/2 mile east of the site.

Certain-Teed and its neighbor, GAF Corporation manufactured asbestos containing transit pipe and sheeting and used the field between the properties as an open dump for scrap asbestos containing materials. Both facilities ceased operation in 1979. At this time, both companies hired consulting engineers to draw up closure plans for remediation to comply with the Missouri Solid Waste Management Law. The plans were approved by the Missouri Department of Natural Resources and the companies proceeded with the closure. Remediation included stabilization of the waste pile through seeding, constructing an on-site landfill, and constructing a rip-rap blanket at the foot of the creek bank. A site inspection in May of 1980, confirmed that the companies were in basic compliance. However, this inspection noted that there was still broken asbestos containing pipe left exposed on the creek bank southeast of the Certain-Teed property.

In May of 1982, the Metropolitan St. Louis Sewer District (MSD) initiated a cleanup through MDNR following a brush hog clearing project that exposed more transit pipe. The cleanup project was performed in August of 1982, and several loads of asbestos scrap were disposed of at West Lake Sanitary Landfill. However, there was approximately 1000 square feet of transit pipe scrap in the upper portion of the creek bank that remained on site according to MDNR reports (Ref. 1).

Two additional site inspections followed in May and June 1988, at both properties (Refs. 2 and 3). These inspections were performed by the EPA, Environmental Monitoring and Compliance Branch (EMCM), Air Monitoring Section. During these inspections, transit pipe scrap was visible along the bank, in the creek bed, and scattered around the properties. Samples were collected and analytical results indicated chrysotile and/or crocidolite asbestos in levels from 7 to 25% in all samples.

In March of 1992, E & E/TAT was tasked to investigate the site and procure samples (Ref. 4). This investigation confirmed the presence of asbestos laden materials at the Certain-Teed and GAF properties and along the banks of Maline Creek. The sample results of this investigation are reported below.

#### RESULTS TABLE, Activity 2-NOX07

NO.	LOCATION	DESCRIPTION	ASBESTOS TYPE	
			CHRYSTOTILE	CROCIDOLITE
001	Waste pile near tank	Insulation	75%	15%
002	Waste pile near tank	Transit	70	15
003	Upper bank of creek	Transit	75	15
004	Creek bed	Transit	75	15
005	Upper bank of creek	Insulation	85	0
006	Upper bank of creek	Sheeting	20	0

The EPA inspected the site on August 26, 1992, as follow-up to the March investigation. Don Sandifer and Jim MacDonald from EPA accompanied by Wayne Miller and others from the Corps of Engineers, St. Louis Branch inspected the Maline creek bank. After the EPA parted company with the Corps of Engineer representatives, concerned citizens pointed out an area approximately 200 yards upstream in which more transit pipe had been exposed. Sandifer and MacDonald investigated this area finding a four foot thickness of transit pipe exposed along the northeast bank of Maline Creek near a bridge over a small tributary to Maline Creek at St. Cyr Road (refer to the site map).

#### **ON-SITE ACTIVITIES**

This current task is in response to the August inspection by the EPA. The EPA tasked TAT to provide photo and video documentation of the area discovered during the August inspection. The area under investigation is located just south of a bridge spanning a tributary of Maline creek along the vicinity of 600 St. Cyr Road, Bellefontaine Neighbors, Missouri.

The TAT arrived at the site on September 3, 1992, at approximately 1200 hours. Shortly after arrival, the area of concern was located. It was not visible from the road, and could only be observed after climbing down the embankment near the bridge and walking down stream approximately 20 yards. TAT proceeded to video tape the area, particularly the northeast bank of the creek where the transit pipe was exposed. After videotaping the area, TAT photo-documented the area. At 1400 hours, TAT left the site.

TAT made the following observations during the brief site visit:

- \* The transit pipe is exposed at a cut bank of the Maline Creek where the creek bends from a northwest-southeast direction to a nearly east-west direction (refer to Site Map).
- \* The bank where the pipe is exposed is approximately 15 to 20 feet high and from 150 to 200 feet in length (refer to Site Map and Fig. 1).
- \* The landfill, where exposed, consists of three distinct layers (refer to Fig. 1 and Photolog). The first layer, approximately two feet thick, is comprised of a soil cover mixed with pipe fragments and connector rings. The second layer, approximately two to three feet thick, is comprised almost exclusively of transit pipe fragments and connector rings with no apparent fill material. The third layer, approximately two feet thick, is comprised of asbestos sheeting, some insulation material, and fill.

- \* The top two layers overhang the bank approximately two to three feet. There are areas where cave-ins and slumping have occurred, leaving transit pipe and debris near the edge of the creek or in the creek itself (refer to Fig. 1 and Photolog).

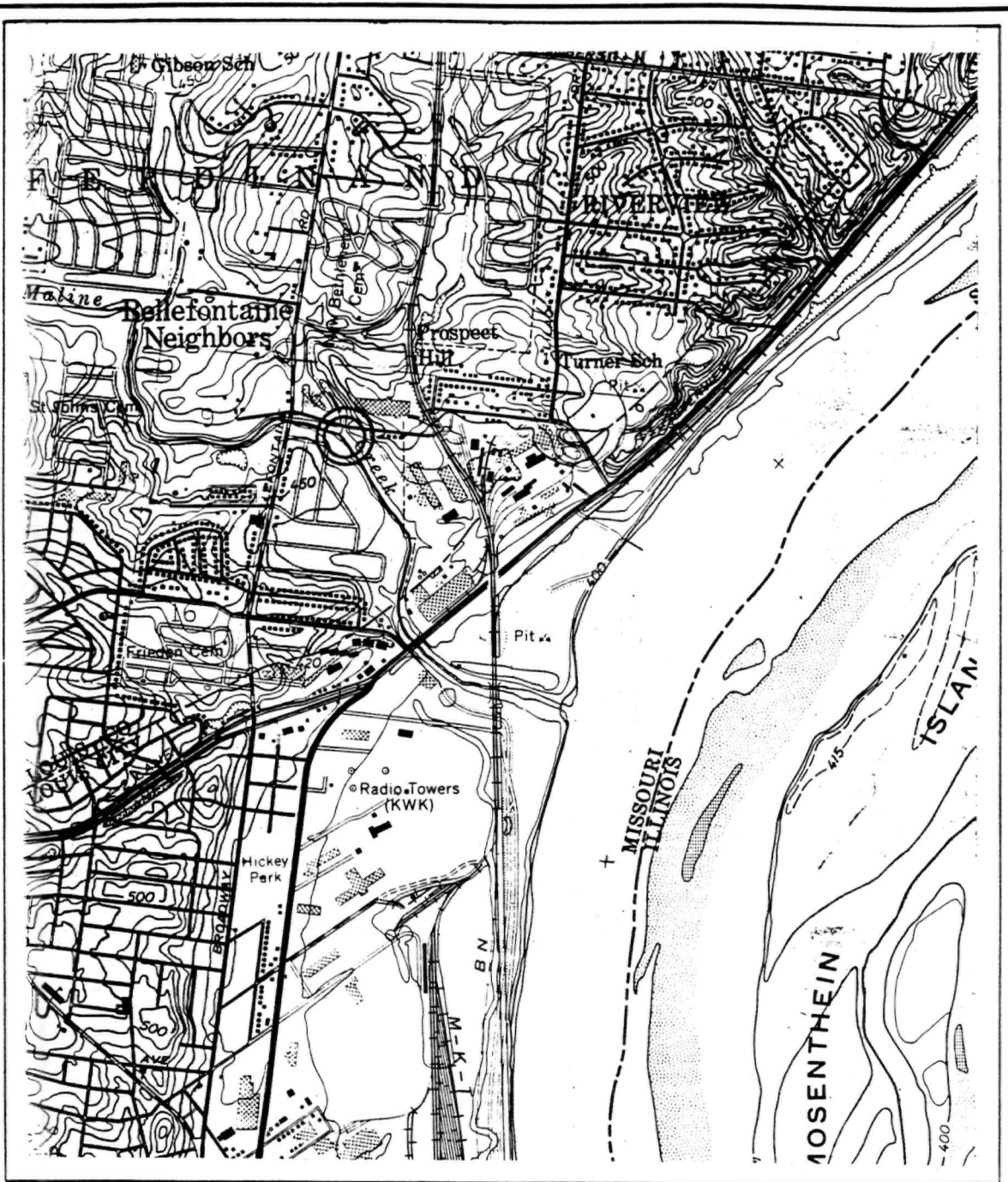
#### **ATTACHMENTS**

References  
Site Locator Map  
Site Map  
Figure 1  
Photographic Record



## REFERENCES

1. August 24-28, 1984, Abandoned/Uncontrolled Hazardous Waste Site Investigation, Preliminary Assessment, Branch Metal Processing Company, Case # 534.918, Missouri Department of Natural Resources, St. Louis Regional Office.
2. 1988, Site Inspection: Certain-Teed Transit Pipe Plant, St. Louis, Missouri, United States Environmental Protection Agency, Environmental Monitoring and Compliance Branch (EMCM).
3. 1988, Site Inspection: GAF Transit Plant, St. Louis, Missouri, United States Environmental Protection Agency, Environmental Monitoring and Compliance Branch (EMCM).
4. May 8, 1992, Site Assessment Report: Certain-Teed Transit Pipe, A.K.A. Maline Creek, Ecology & Environment, Inc., Technical Assistance Team (E & E/TAT) for the Environmental Protection Agency Emergency Planning and Response Branch (EPA/EP&R), TDD# T07-9203-012.



QUADRANGLE LOCATION

SCALE 1:24000

0 .5 1 MILE

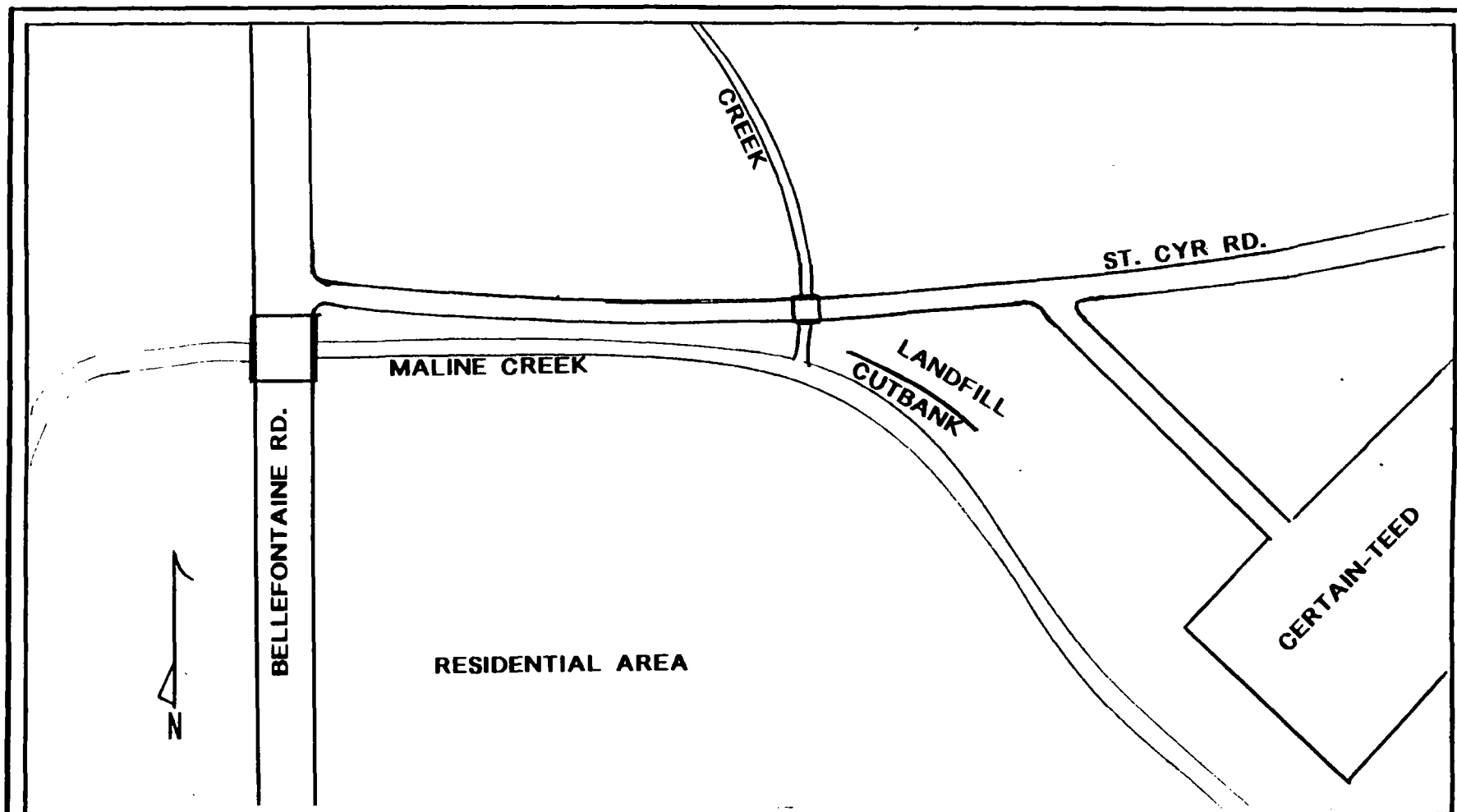
0 .5 1 KILOMETER

## LOCATOR MAP

TDD#T07-9209-003

MALINE CREEK SITE

PAN#EMO0307SBA

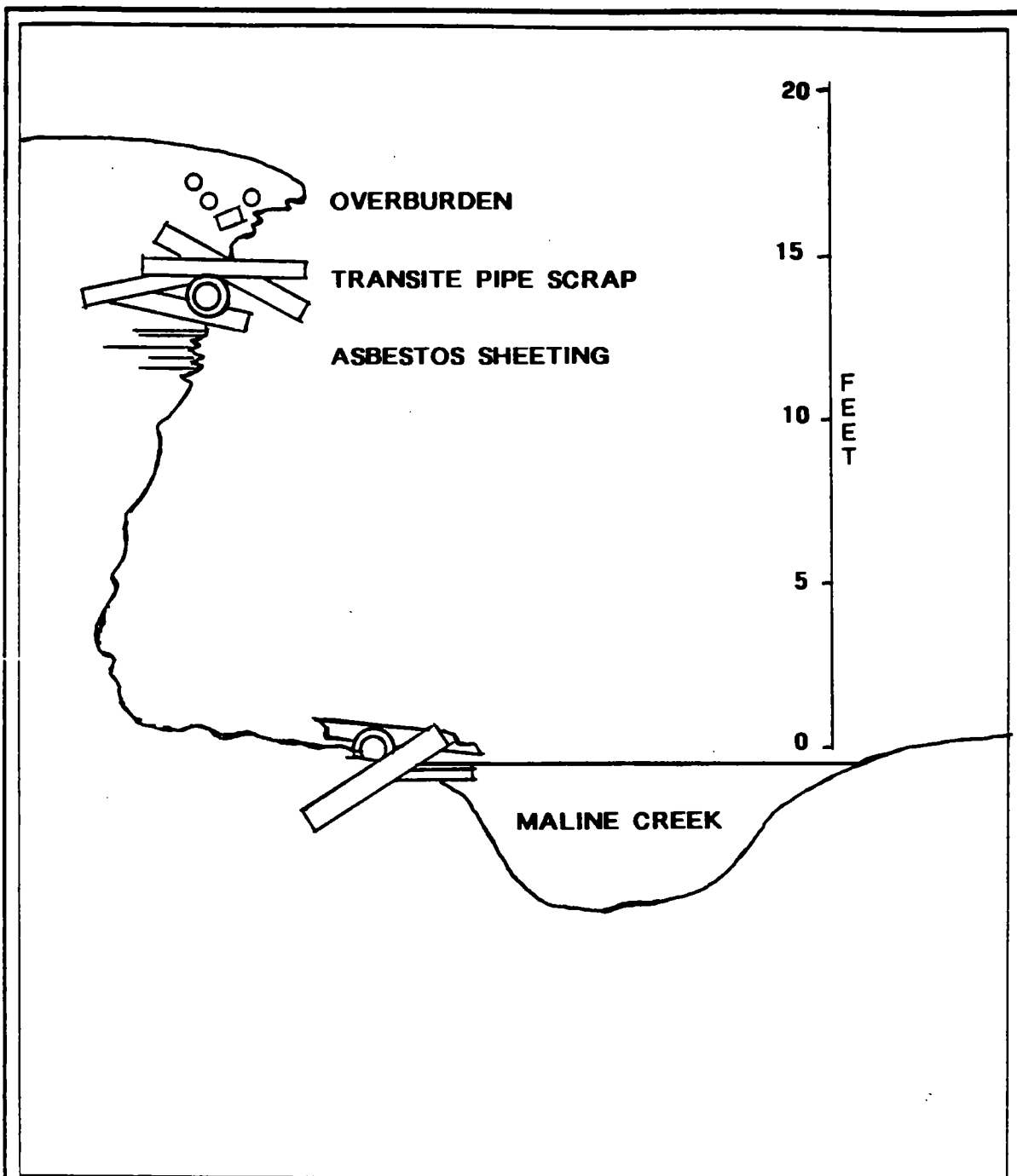


# MALINE CREEK SITE MAP

SCALE: 1 inch = 200 feet

TDD#T07-9209-003

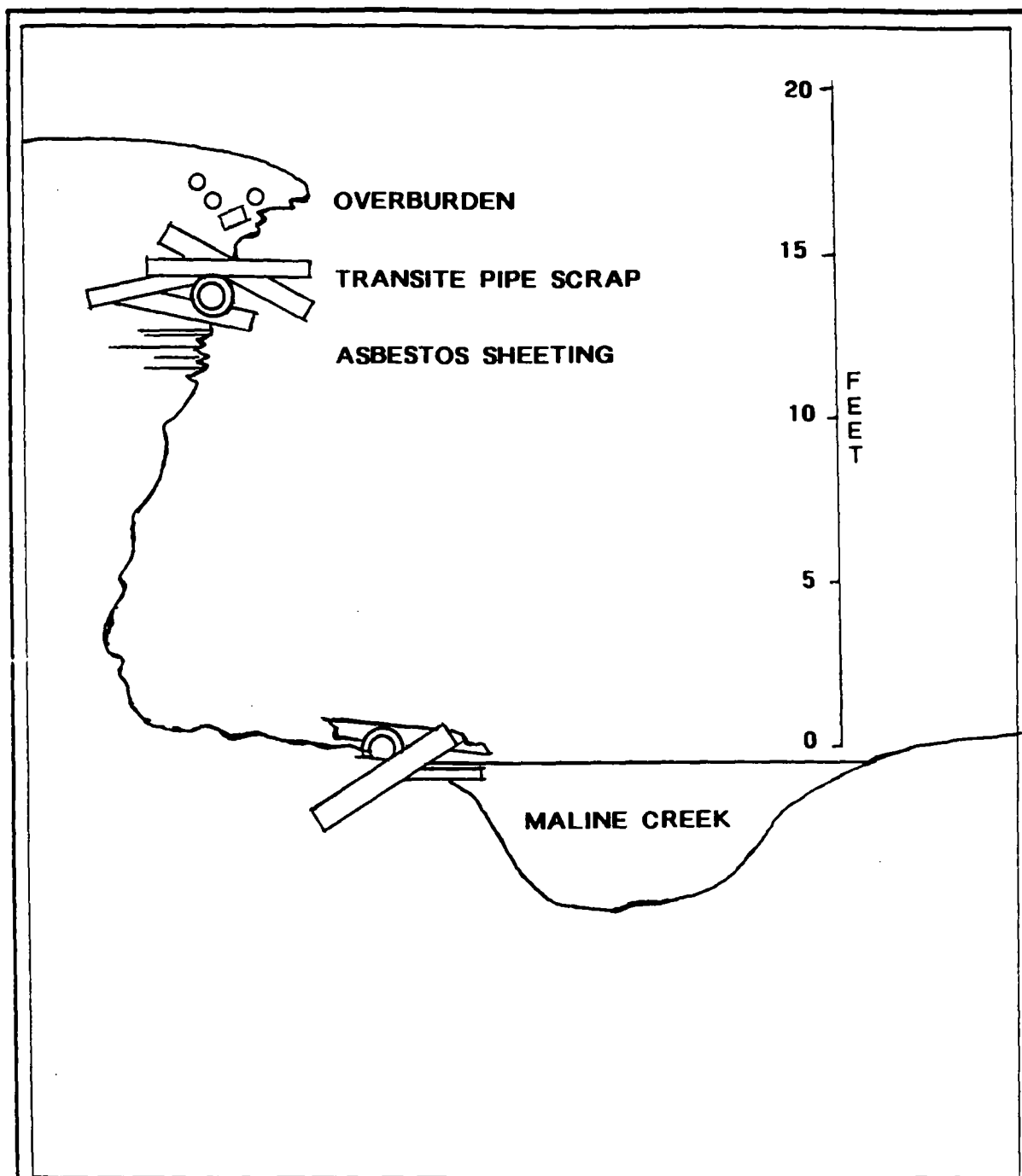
PAN#EMO0307SBA



**FIG. 1      CROSS SECTION OF LANDFILL  
EXPOSED AT MALINE CREEK**

**TDD#T07-9209-003**

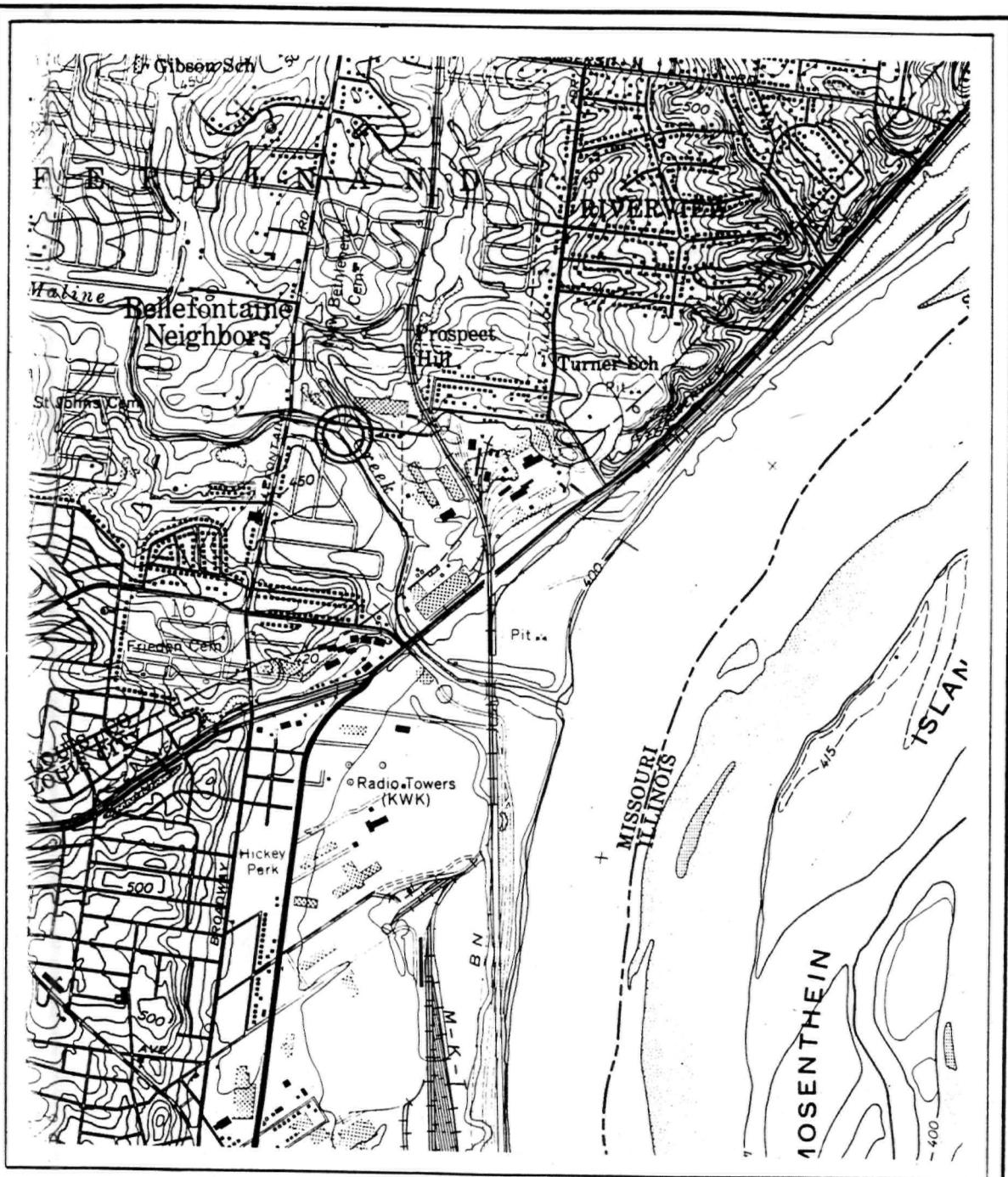
**PAN#EMO0037SBA**



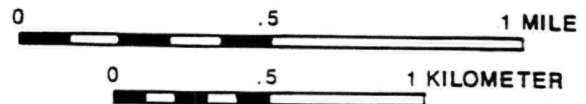
**FIG. 1      CROSS SECTION OF LANDFILL  
EXPOSED AT MALINE CREEK**

**TDD#T07-9209-003**

**PAN#EMO0037SBA**



SCALE 1:24000

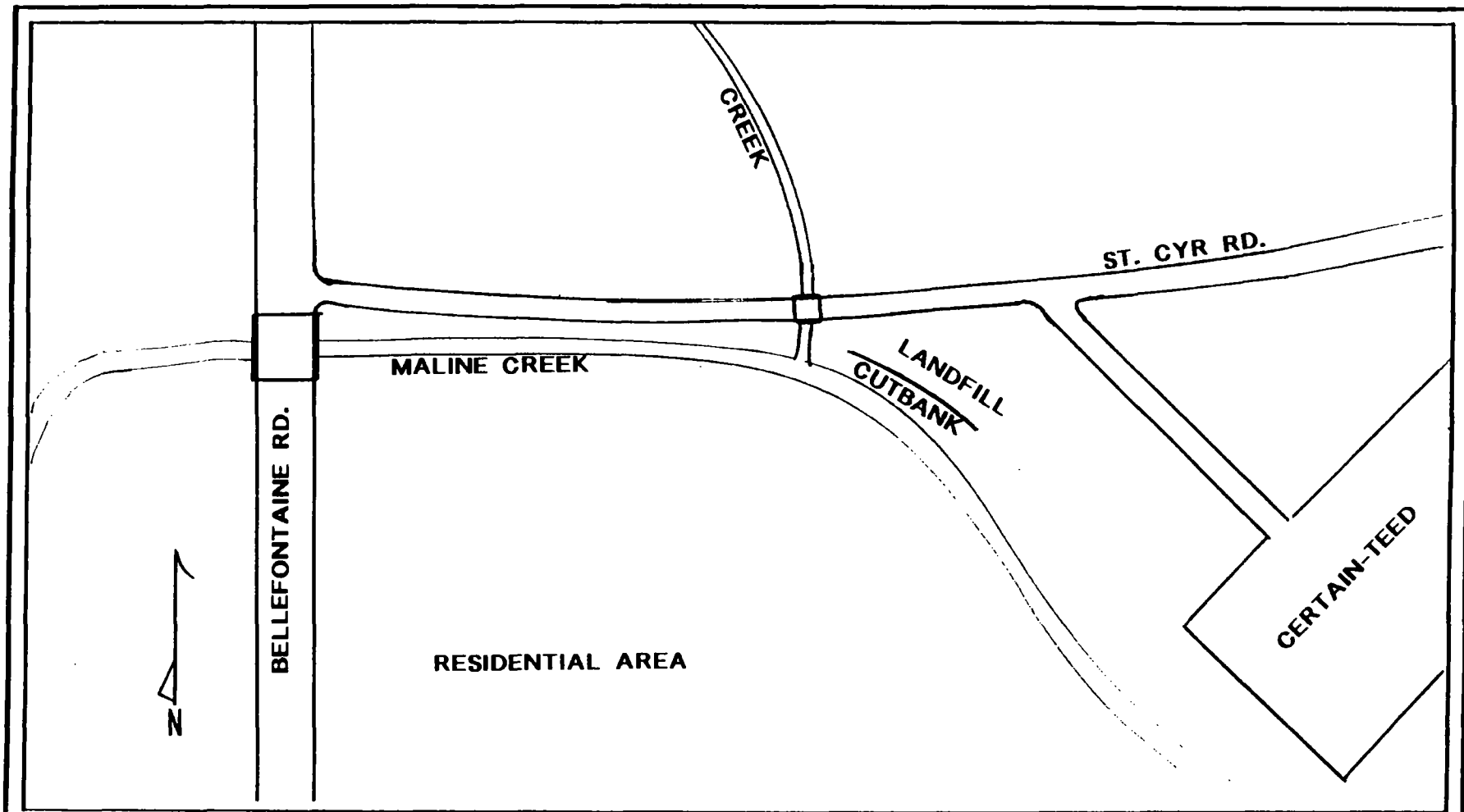


## LOCATOR MAP

TDD#T07-9209-003

MALINE CREEK SITE

PAN#EMO0307SBA



**MALINE CREEK SITE MAP**

SCALE: 1 inch = 200 feet

TDD#T07-9209-003

PAN#EMO0307SBA

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Ecology and Environment, Inc.

Photographic Record

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Client: EPA  
Camera Make: Olympus OM77AF

E & E Job No.: ZT1071  
Serial No. : 1047439

SITE NAME: Maline Creek Site  
SITE LOCATION: Bellefontaine Neighbors, Missouri  
TDD/PAN No.: T07-9209-003/EMO0307SBA

Photographer: Joe Parish  
Date/Time : 9/3/92/1332  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 1  
Direction : SE  
Comments :

Site overview, looking  
downstream



Photographer: Joe Parish  
Date/Time : 9/3/92/1335  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 2  
Direction : SE  
Comments :

Overview of bank, downstream





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Ecology and Environment, Inc.

Photographic Record

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Client: EPA

Camera Make: Olympus OM77AF

E & E Job No.: ZT1071

Serial No. : 1047439

SITE NAME: Maline Creek Site

SITE LOCATION: Bellefontaine Neighbors, Missouri

TDD/PAN No.: T07-9209-003/EMO0307SBA

Photographer: Joe Parish  
Date/Time : 9/3/92/1335  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 3  
Direction : E  
Comments :

Bank, NE side of creek



Photographer: Joe Parish  
Date/Time : 9/3/92/1337  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 4  
Direction : NE  
Comments :

Top six feet of bank



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Ecology and Environment, Inc.

Photographic Record

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Client: EPA  
Camera Make: Olympus OM77AF

E & E Job No.: ZT1071  
Serial No.: 1047439

SITE NAME: Maline Creek Site  
SITE LOCATION: Bellefontaine Neighbors, Missouri  
TDD/PAN No.: T07-9209-003/EMO0307SBA

Photographer: Joe Parish  
Date/Time : 9/3/92/1338  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 5  
Direction : SE  
Comments :

Close view of bank showing  
'insulation' material



Photographer: Joe Parish  
Date/Time : 9/3/92/1340  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 6  
Direction : SE  
Comments :

Transite pipe protruding from  
bank



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Ecology and Environment, Inc.

Photographic Record

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Client: EPA  
Camera Make: Olympus OM77AF

E & E Job No.: ZT1071  
Serial No. : 1047439

SITE NAME: Maline Creek Site  
SITE LOCATION: Bellefontaine Neighbors, Missouri  
TDD/PAN No.: T07-9209-003/EMO0307SBA

Photographer: Joe Parish  
Date/Time : 9/3/92/1342  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 7  
Direction : SE  
Comments :

Transite pile near creek



Photographer: Joe Parish  
Date/Time : 9/3/92/1344  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 8  
Direction : SE  
Comments :

Transite pipe/fallen stump



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Ecology and Environment, Inc.

Photographic Record

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Client: EPA  
Camera Make: Olympus OM77AF

E & E Job No.: ZT1071  
Serial No. : 1047439

SITE NAME: Maline Creek Site  
SITE LOCATION: Bellefontaine Neighbors, Missouri  
TDD/PAN No.: T07-9209-003/EMO0307SBA

Photographer: Joe Parish  
Date/Time : 9/3/92/1344  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 9  
Direction : E  
Comments :  
  
SE extremity of bank erosion



Photographer: Joe Parish  
Date/Time : 9/3/92/1344  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 10  
Direction : W  
Comments :  
  
Looking upstream toward bridge  
over Maline Creek at  
Bellefontaine Rd.





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Ecology and Environment, Inc.

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Photographic Record

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Client: EPA  
Camera Make: Olympus OM77AF

E & E Job No.: ZT1071  
Serial No. : 1047439

SITE NAME: Maline Creek Site  
SITE LOCATION: Bellefontaine Neighbors, Missouri  
TDD/PAN No.: T07-9209-003/EMO0307SBA

Photographer: Joe Parish  
Date/Time : 9/3/92/1346  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 11  
Direction : E  
Comments :

Transite connector rings  
showing asbestos fibers



Photographer: Joe Parish  
Date/Time : 9/3/92/1347  
Lens: Type: 50mm/normal  
Serial No.: 1063023  
Frame No. : 12  
Direction : NE  
Comments :

Connector rings, NE bank

